embodiment has been illustrated and described, it will be obvious to those skilled in the art that various modifications can be made without departing from the spirit and scope of this invention. Such modifications are to be considered as included in the following claims unless the claims expressly recite differently.

WHAT IS CLAIMED:

1. A stent apparatus comprising:

a substantially tubular member with an inside surface and an outside surface; and,

securing element for securing the tubular member to the exterior of a body lumen.

2. A stent as in claim 1 wherein:

the tubular member has an inner diameter greater than the exterior diameter of the lumen.

3. A stent as in claim 1 wherein:

the tubular member comprises biologically inert material.

4. A stent as in claim 3 wherein:

the inert material is a shape-memory material.

5. A stent as in claim 3 wherein:

the inert material is PTFE.

6. A stent as in claim 3 wherein:

the inert material is Dacron.

7. A stent as in claim 3 wherein:

the tubular member further comprises a biologically active material.

8. A stent as in claim 7 wherein:

the active material is a drug-releasing coating on a surface of the stent that permits timed or prolonged pharmacological activity.

9. A stent as in claim 1 wherein:

the tubular member comprises resorbable material.

10. A stent as in claim 9 wherein:

the tubular member further comprises a biologically active material.

11. A stent as in claim 10 wherein:

the tubular member is shape-memory material.

12. A stent as in claim 1 wherein:

the tubular member is porous for providing nutrients or irrigation to the lumen.

13. A stent as in claim 1 wherein:

the tubular member comprises a braided material.

14. A stent as in claim 1 wherein:

the tubular member is a single unified member.

15. A stent as in claim 1 wherein:

the tubular member comprises at least two members flexibly joined together.

16. A stent as in claim 15 wherein:

the members are joined by a hinge.

17. A stent as in claim 1 wherein:

the tubular member is bifurcated.

18. A stent as in claim 1 wherein:

the tubular member comprises a radioactive element for delivering radiation directly to the lumen.

19. A stent as in claim 18 wherein:

the tubular member further comprises a biologically active material.

20. A stent as in claim 1 wherein:

the securing element is a barb.

21. A stent as in claim 1 wherein:

the securing element is a hook.

22. A stent as in claim 1 wherein:

the securing element is an adhesive.

23. A stent as in claim 22 wherein:

the adhesive is biologically inert.

24. A stent as in claim 22 wherein:

the adhesive requires curing.

25. A stent as in claim 1 wherein:

the securing element is a suture.

26. A stent as in claim 1 wherein:

the securing element are locks that close the stent tightly onto the lumen to prevent it from slipping but not to restrict the lumen.

27. A stent as in claim 1 wherein:

the tubular member covers less than the entire circumference of the lumen.

28. A stent as in claim 1 further comprising:

a reinforcing layer for strengthening the tubular member.

29. A stent as in claim 28 wherein:

the reinforcing layer comprises a braided material.

30. A method of supporting a body lumen comprising:

placing a support around the exterior of a body lumen; and,

securing the support to the lumen.

31. A method of support as in claim 30 wherein:

the support covers less than the total circumference of the lumen.

32. A method of support as in claim 30 wherein:

the support comprises a biologically inert material.

33. A method of support as in claim 32 wherein:

the support further comprises a shape-memory material.

34. A method of support as in claim 30 wherein:

the support comprises a biologically active material.

35. A method of support as in claim 30 wherein:

the support comprises resorbable material.

36. A method of support as in claim 30 wherein:

the support comprises a radioactive element for delivering radiation directly to the lumen.

37. A method as in claim 30 wherein:

the support is porous.

38. A method of support as in claim 30 wherein:

the support is a single unified member.

39. A method of support as in claim 30 wherein:

the support comprises at least two members flexibly joined together.

40. A method of support as in claim 30 wherein:

the support is bifurcated.

41. A method of support as in claim 30 wherein:

the support is secured by a barb.

42. A method of support as in claim 30 wherein:

the support is secured by a hook.

43. A method of support as in claim 30 wherein:

the support is secured by an adhesive.

44. A method of support as in claim 30 wherein:

the support comprises a braided material.

45. A method of support as in claim 30 wherein:

the support is substantially composed of resorbable material.

46. A method of support as in claim 30 wherein:

the support is porous.

47. A method of support as in claim 30 wherein:

the support comprises at least two members flexibly joined together.

48. A method of support as in claim 30 wherein:

the support is secured by sutures.

49. A method of support as in claim 30 wherein:

the support locks onto the lumen to prevent it from slipping.

50. A method of support as in claim 30 further comprising:

a reinforcing layer for strengthening the support.

51. A method for implanting a prosthesis to the exterior of a body lumen comprising:

providing for a stent as described in claim 1;

inserting the stent around a desired location on the exterior of the lumen;

providing for controllable contraction of the prosthesis at the desired location by exerting a force upon the prosthesis to deform it such that it contacts the lumen sufficiently to secure it to the lumen.

52. A method for implanting a prosthesis to the exterior of a body lumen comprising:

providing for a stent as described in claim 1;

inserting the stent around a desired location on the exterior of the lumen;

providing for controlled expansion of the lumen such that it contacts the stent sufficiently to secure it to the lumen.